

# ESTUARIES & COASTAL WETLANDS OF LAKE SUPERIOR

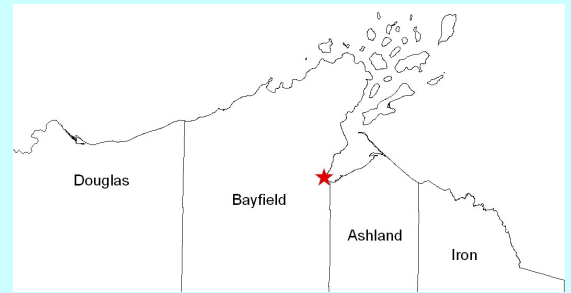
## Whittlesey Creek

Approximate Size: 25 acres\*

Ownership: Private/US Fish and Wildlife Service

Year Last Surveyed by WDNR/NHI: 2012

GLCWC Classification: Open Drowned River Mouth



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### *Site Description*

Whittlesey Creek and its multiple spring-fed tributaries meander toward the southern end of Chequamegon Bay, forming a 25-acre wetland complex of Emergent and Submergent Marsh, Northern Sedge Meadow, and Alder Thicket where they empty into Lake Superior. The surrounding land is dotted with residential and agricultural development within 0.5 miles of the creek mouth, and the lower portion of Whittlesey Creek has been channelized and dredged. Most of the emergent vegetation is found in the warmer water nearer to the creek mouth while the back channels, which are closer to the spring heads, have notably colder water and less emergent aquatic vegetation. This creek is an important spawning and rearing stream for migratory fishes, including coho salmon and is an important site for coaster brook trout habitat rehabilitation.

Adjacent to the creek mouth a narrow, low sandbar, vegetated by mostly ruderal species creates a protected embayment where submergent aquatic macrophytes grow in quiet, shallow water. This sandbar is also an important staging area for gulls and other migratory birds. Purple loosestrife (*Lythrum salicaria*), common bur-reed (*Sparganium eurycarpum*), arrowhead (*Sagittaria latifolia*) and other emergent aquatic vegetation are found along the protected shorelines, which quickly grades into a small but fair-quality Northern Sedge Meadow, the dominant community at this site. Species common here include tussock sedge (*Carex stricta*), Canada blue-joint grass (*Calamagrostis canadensis*), spotted joe pye-weed (*Eupatorium maculatum*) and fringed brome (*Bromus ciliatus*). An Alder Thicket dominated by speckled alder (*Alnus incana*) and willow (*Salix* spp.) lines the edges of a dredged channel of Whittlesey Creek. Willows were planted in this area for streambank stabilization but as they mature and die they are becoming a less important component of the vegetation.

\*Area includes lower river, associated wetlands and bay.

## Threats

The dredging and channelization of the lower portion of Whittlesey Creek has impacted various hydrological traits as well as the amount of wetland in the area. On a watershed scale, clearcutting and conversion of forested land to agriculture have resulted in erosion problems along Whittlesey Creek, and large amounts of clay and sand deposition have occasionally prevented trout and salmon from spawning. Also, non-native invasive plant species threaten to replace native vegetation and reduce biodiversity. Non-native species noted at this site during recent surveys include purple loosestrife and reed canary grass (*Phalaris arundinacea*) in the wetlands and birds-foot trefoil (*Lotus corniculatus*), Siberian elm (*Ulmus pumila*), white and yellow sweet clover (*Melilotus alba* and *M. officinalis*), common tansy (*Tanacetum vulgare*) and forget-me-not (*Myosotis scorpioides*) on the sandbar.

## Additional Comments

In 1998 the US Fish and Wildlife Service established the Whittlesey Creek National Wildlife Refuge to help restore coast-er brook trout habitat. Besides being important fish habitat, the southern end of Chequamegon Bay serves as an important stop-over for migrating passerines, raptors, shorebirds and waterbirds. Whittlesey Creek is noted as an Outstanding Resource Water (ORW), a designation that confers additional protection from the effects of pollution.

## Abbreviations and Helpful References

GLCWC - Great Lakes Coastal Wetland Classification. [glc.org/wetlands/pdf/wetlands-class\\_rev1.pdf](http://glc.org/wetlands/pdf/wetlands-class_rev1.pdf)

WDNR Coastal Wetlands webpages - <http://dnr.wi.gov>, Keyword: "coastal wetlands"

WDNR/NHI - Wisconsin Department of Natural Resources, Natural Heritage Inventory Program.

<http://dnr.wi.gov> , Keyword: "natural heritage"

Whittlesey Creek National Wildlife Refuge - [http://www.fws.gov/refuge/Whittlesey\\_Creek](http://www.fws.gov/refuge/Whittlesey_Creek)



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Submergent Marsh at Whittlesey Creek (left). A sandbar serves as an important staging area for migratory birds (right).

## Suggested Citation

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**WISCONSIN COASTAL  
MANAGEMENT PROGRAM**

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